



DIVISION OF OIL AND GAS

March 29, 2011

Mr. Daniel S. Sullivan, Commissioner Alaska Department of Natural Resources 550 W. 7th Ave., Suite 1400 Anchorage, AK 99501-3557 Rex A. Rock, Sr., President Arctic Slope Regional Corporation P. O. Box 129 Barrow, Alaska 99723

Subject: Putu Unit Application

In accordance with 11 AAC 83.306, Brooks Range Petroleum Corporation ("BRPC"), as Operator and on behalf of the working interest owners of the proposed Putu Unit, hereby respectfully petitions the Department of Natural Resources (the "Department") and the Arctic Slope Regional Corporation ("ASRC") to approve the proposed Putu Unit Agreement and the formation of the proposed Putu Unit. BRPC is qualified to be a unit operator under 11 AAC 83.331.

In accordance with 11 AAC 83.341, 11 AAC 83.343, and Section 8.1 of the proposed Putu Unit Agreement, BRPC, as operator and on behalf of the working interest owners of the proposed Putu Unit hereby requests approval of the Initial Unit Plan for the Putu Unit.

I. APPROVAL OF UNIT AGREEMENT AND FORMATION OF PUTU UNIT

A. <u>Proposed Unit Agreement</u>. BRPC requests that the Department and ASRC to approve the proposed Putu Unit Agreement enclosed herein.

B. Proposed Unit Area.

11 AAC 83.356(a) provides that a unit must encompass the minimum area required to include all or part of one or more oil or gas reservoirs, or all or part of one or more potential hydrocarbon accumulations. The proposed Putu Unit encompasses a number of identified prospects including the oil-bearing Kuparuk formation reservoir, encountered in BRPC's Tofkat #1 exploration well. A CONFIDENTIAL Geological, Geophysical, and Engineering Submittal, with well data, maps, seismic lines, and interpretations of those data supporting the prospects and accumulations in the proposed Putu Unit Area will be submitted under a separate cover letter.

A map of the proposed Putu Unit Area is attached to the proposed Putu Unit Agreement as Exhibit B, which is enclosed herein.

The proposed Putu Unit will unitize all of the following Tracts which are State of Alaska leases, totaling 39,993.83 acres:

Tract No.	ADL No.	Total Acres	Effective Date	Expiration Date
1	390674	640.00	8/1/2005	7/31/2012
2	390674	640.00	8/1/2005	7/31/2012
3	390675	640.00	8/1/2005	7/31/2012
4	390675	605.97	8/1/2005	7/31/2012
5	391536	5.53	7/1/2010	6/30/2017
6	390672	227.73	8/1/2005	7/31/2012
7	391535	615.86	7/1/2010	6/30/2017
8	390673	24.14	8/1/2005	7/31/2012
9	390677	367.96	8/1/2005	7/31/2012
10	391537	231.32	7/1/2010	6/30/2017
11	391016	363.06	9/1/2006	8/31/2013
12	391537	276.94	7/1/2010	6/30/2017
13	391015	640.00	9/1/2006	8/31/2013
14	390676	640.00	8/1/2005	7/31/2012
15	390676	640.00	8/1/2005	7/31/2012
16	390676	640.00	8/1/2005	7/31/2012
17	390677	242.67	8/1/2005	7/31/2012
18	391537	409.55	7/1/2010	6/30/2017
19	391538	203.66	7/1/2010	6/30/2017
20	390679	436.40	8/1/2005	7/31/2012
21	390678	640.00	8/1/2005	7/31/2012
22	390678	640.00	8/1/2005	7/31/2012

23	391203	640.00	9/1/2007	8/31/2012
24	391203	640.00	9/1/2007	8/31/2012
25	390678	640.00	8/1/2005	7/31/2012
26	391204	640.00	9/1/2007	8/31/2012
27	391205	537.13	9/1/2007	8/31/2012
28	391538	102.87	7/1/2010	6/30/2017
29	391195	1,487.04	9/1/2007	8/31/2012
30	391194	2,560.00	9/1/2007	8/31/2012
31	391193	2,560.00	9/1/2007	8/31/2012
32	390457	2,533.00	4/1/2004	3/31/2011
33	390458	2,544.00	4/1/2004	3/31/2011
34	391196	2,560.00	9/1/2007	8/31/2012
35	391197	2,560.00	9/1/2007	8/31/2012
36	391198	2,544.00	9/1/2007	8/31/2012
37	391201	2,555.00	9/1/2007	8/31/2012
38	391200	2,560.00	9/1/2007	8/31/2012
39	391199	2,560.00	9/1/2007	8/31/2012

39,993.83

A more complete description of the leases proposed to be included in the Putu Unit Area is set forth in Exhibit A to the proposed Putu Unit Agreement.

C. Approval Criteria.

11 AAC 83.303(a) Criteria

BRPC respectfully submits that approval of the proposed Putu Unit Agreement and formation of the Putu Unit meet the criteria of 11 AAC 83.303(a), because it will:

- ⇒ promote the conservation of all natural resources, including all or part of an oil and gas pool, field or like area:
 - Unitization of the leases in the Putu Unit Area provides an efficient, integrated approach to development of all the potential reservoirs which promotes the conservation of all natural resources. Environmental impacts will be reduced by unitized development of these accumulations. One operator can efficiently plan and execute a development plan for all these numerous potential reservoirs utilizing a minimum amount of surface facilities and infrastructure.
 - BRPC's relationship with the Kuukpik Corporation offers the State of Alaska
 and Arctic Slope Regional Corporation the best opportunity to for near term
 exploration and development in the Putu Unit Area. BRPC is committed to
 working with Kuukpik Corporation and the residents of the Village of Nuiqsut
 to find ways to mitigate potential impacts from oil and gas exploration and
 development within the proposed Putu Unit Area.
- ⇒ promote the prevention of economic and physical waste:
 - Unitization of the leases in the Putu Unit Area will promote the prevention of economic and physical waste by maximizing the recovery of oil and gas, and avoiding competitive developments of reservoirs which causes waste. Unitization allows exploration and development wells to be drilled in the best possible location to maximize drainage. Unitization allows for implementation of economic reservoir pressure maintenance efforts as early as first production in each individual reservoir. Unitization allows numerous relatively small accumulations to share facilities and infrastructure to achieve synergies required to justify economic development.
 - The high cost, high risk, and the marginal nature of the potential hydrocarbon accumulation requires numerous prospects being explored and developed as a program which then generate economic synergies and improves the probability of discovering an economic development. The pace of exploration and development is linked to the ability of any operator to accumulate an acreage position which offers sufficient access and control of enough prospects to offer said synergies and improved probability of an economic development. To amass all of the oil and gas leases comprising the proposed Putu Unit Area, BRPC, as operator, successfully completed the land transactions described in the attached prior exploration activities document over the last 7 years.
- ⇒ provide for the protection of all parties of interest:
 - Unitization of the leases in the Putu Unit Area will provide for the protection of all parties of interest by allowing production from each individual reservoir to be allocated back to each tract contributing to production in paying quantities based on the interpretation of all the geological, geophysical, engineering, and well data available. This ensures that the payment of royalties from production is allocated equitably among the mineral owners.

• To date, the WIO's have spent well over \$25 MM exploring the proposed Putu Unit Area. The information obtained from this effort has led to the identification of many potential hydrocarbon accumulations and additional prospects inside the proposed Putu Unit Area. The WIO's wish to continue their exploratory activities and conduct future development activities in the Putu Unit Area subject to the terms and conditions of the proposed Putu Unit Agreement.

11 AAC 83.303(b) Criteria

1. Environmental Costs and Benefits of Formation of the Putu Unit (11 AAC 83.303(b)(1)).

During exploration and through development operations of the Putu Unit, activities will have the minimum amount of surface impact consistent with the prudent and efficient development practices of the oil and gas resources on the North Slope. This can only happen through unitized development. The environmental impacts would be significantly greater if the reservoirs were developed on a lease-by-lease or well-by-well basis, rather than on an integrated unitized basis.

2. <u>Geological and Engineering Characteristics of the Putu Unit reservoirs (11 AAC 83.303(b)(2)).</u>

The CONFIDENTIAL Geological, Geophysical, and Engineering Submittal will be submitted separately and will describe the characteristics of the Putu Unit reservoirs and exploration prospects.

3. Prior Exploration Activities in the Proposed Putu Unit Area (11 AAC 83.303(b)(3).

A description of prior exploration activities in the proposed Putu Unit Area is attached.

4. Plans for Exploration and Development of the Proposed Putu Unit Area (11 AAC 83.303(b)(4).

Exhibit G to the proposed Putu Unit Agreement sets forth the Putu Unit working interest owners' proposed Initial Unit Plan.

5. Economic Costs and Benefits to the State (11 AAC 83.303(b)(5).

A primary goal of unitization is the protection of the parties of interest in one or more hydrocarbon accumulations. The formation of the proposed Putu Unit extends these benefits and protections to leases considered likely to be capable of contributing to production from all the Putu Unit reservoirs.

The State of Alaska's and ASRC's economic interest is protected by maximizing the physical recovery of hydrocarbons from the Putu Unit reservoirs. Maximizing hydrocarbon recovery in turn assures that the production-based revenue accruing to the State and ASRC is also maximized. Allocation of said production on a unitized tract basis ensures a clear and equitable share of royalties between the minerals owners.

Unitization also encourages investment in exploration which will lead to development of new, currently undeveloped leases. Unitization fosters new production sources which will stem the decline in North Slope production, generating jobs for North Slope residents and other Alaskans, provide long-term tax revenue to the North Slope Borough and State of Alaska, and increase the longevity of the Trans-Alaska Pipeline System. Therefore, the State's and ASRC's economic interest is protected by unitized development of the Putu Unit reservoirs.

Unitized operations within the proposed Putu Unit Area will also minimize surface impacts to the area's cultural, biological, and environmental resources.

6. Other relevant factors (11 AAC 83.303(b)(6).

BRPC is one of only two companies to have successfully negotiated a surface access agreement with Kuukpik Corporation. BRPC is committed to working with Kuukpik Corporation, the residents of the Village of Nuiqsut, and Native Allotment Owners to find ways to mitigate potential impacts from oil and gas exploration and development within the proposed Putu Unit Area. BRPC current plans are to explore and develop Putu Unit Area Tracts within the municipality of the Village of Nuiqsut from pads located outside of the municipality by using extended reach drilling technologies. This plan mitigates potential impacts to the residents of the Village of Nuiqsut.

D. Term.

BRPC requests that the effective date of the formation of the proposed Putu Unit be March 31, 2011, and the term last for five (5) years until March 31, 2016, subject the terms and conditions of the Putu Unit Agreement. Pursuant to 11 AAC 83.336 (a)(2), if exploration operations have been conducted in accordance with the Initial Plan, as approved, and subject to the Department's and ASRC's approval after the first five years, BRPC requests the Putu Unit be extended for another five years.

E. Attachments.

The following items required by 11 AAC 83.306 are provided as part of and in support of this application for formation of the Putu Unit:

o Putu Unit Agreement (11 AAC 83.306(1))

- 1. Exhibit A Map of the Putu Unit Area
- 2. Exhibit B Description of Leases in the Putu Unit Area
- 3. Exhibit G Initial Unit Plan (11 AAC 83.306(1))
- o The Areawide AMI Joint Operating Agreement, dated September 16, 2008, is submitted for information purposes only (11 AAC 83.306(2)).
- Geological, Geophysical, and Engineering Submittal (11 AAC 83.306(4))
 (CONFIDENTIAL), submitted under separate cover.
- A description of prior exploration activities in the proposed Putu Unit Area and vicinity is attached.
- Back-up documents:
 - 1. Affidavit of Mailing executed by James R. Winegarner.
 - 2. Copies of cover letters from BRPC to all the working interest owners, farmors, and overriding royalty interest owners in the proposed Putu Unit Area inviting them to join the proposed Putu Unit Agreement, along with certified mail receipts. These letters and receipts show that all working interest owners in the proposed Putu Unit Area have been invited to join the proposed Putu Unit Agreement.

II. APPROVAL OF INITIAL UNIT PLAN

In accordance with 11 AAC 83.341, 11 AAC 83.343, and Section 8.1 of the proposed Putu Unit Agreement, BRPC, as operator and on behalf of the working interest owners of the proposed Putu Unit hereby requests the Department's and ASRC's approval of the Initial Unit Plan for the Putu Unit. The Initial Unit Plan is enclosed herein.

III. CONCLUSION

Filed herewith is the required number of copies of the complete application. Two (2) copies of the Geological, Geophysical, and Engineering Submittal will be submitted under separate cover to the Department. BRPC requests that Geological, Geophysical, and Engineering Submittal, once submitted, be held **CONFIDENTIAL** by the State. Also submitted herewith is BRPC's receipt in the amount of \$5,000 for payment of the filing fee specified in 11 AAC 83.306(6) and 11 AAC 05.010.

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If you have any questions or require additional information, please contact me at Brooks Range Petroleum Corporation's offices located at 510 L Street, Suite 601, Anchorage, Alaska, 99501; direct phone line: (907) 865-5804; or e-mail: jwinegarner@brpcak.com.

James R. Winegarner, CPL

Vice President of Land & External Affairs

Enclosures

Cc: Mr. Kevin Banks, Director
Division of Oil and Gas
Alaska Department of Natural Resources
550 W. 7th Ave., Suite 1100

Anchorage, AK 99501-3557

Teresa Imm, Director of Resource Development & Land Arctic Slope Regional Corporation 3900 C Street, Suite 801 Anchorage, Alaska 99503-5963